IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:	B. Alexander et al.	Attorney Docket No.:	VIGL118276
Application No.:	10/007,136	Art Unit: 2621 / Confirmation No:	1933
Filed:	December 3, 2001	Examiner:	T.T. Vo
Title:	SYSTEM AND METHOD FOR PROCESSING VIDEO DATA UTILIZING MOTION DETECTION AND SUBDIVIDED VIDEO FIELDS		

APPELLANTS' APPEAL BRIEF

Seattle, Washington 98101

November 9, 2009

TO THE COMMISSIONER FOR PATENTS:

This Appeal Brief is filed in support of the Notice of Appeal filed on June 8, 2009, appealing the Examiner's final rejection, dated December 8, 2008, of pending Claims 1-56. Claims 1, 2, 4-22, 24-39, and 41-56 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 7,023,469, to Olson et al. (hereinafter "Olson"). Moreover, the Office Action rejected Claims 3, 23, and 40 under 35 U.S.C. § 103(a) as being obvious in view of Olson.

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS PLLC
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

TABLE OF CONTENTS

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS PLLC
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

I. REAL PARTY IN INTEREST

The real party in interest is Vigilos, Inc., 2030 First Avenue, Suite 101, Seattle, Washington 98121, by assignment recorded on February 11, 2002, at Reel 012602, Frame 0392.

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS PLLC
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

II. RELATED APPEALS AND INTERFERENCES

Appellants are not aware of any prior or pending appeals, judicial proceedings, or interferences that may be related to, directly affect or be affected by, or have a bearing on the decision of the Board of Appeals and Interferences (hereinafter the "Board") in the pending appeal.

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS PLLC
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

III. STATUS OF CLAIMS

Claims 1-56 are rejected and on appeal.

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS PLLC
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

IV. STATUS OF AMENDMENTS

Upon information and belief, there are no outstanding amendments filed subsequent to the final Office Action of December 8, 2008.

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS PLLC
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

V. SUMMARY OF CLAIMED SUBJECT MATTER

In the summary below, the page and line numbers correspond to the page and line numbers of the application as filed. However, the references to the detailed description made herein are merely provided as an aid in understanding of the claimed subject matter. Accordingly, the locations referenced in the detailed description are merely exemplary embodiments of the disclosed subject matter and should not be construed as limiting.

With regard to Claim 1, a method of processing image data is provided. (See, for example, the embodiments disclosed in, but not limited to, FIGURE 1; FIGURE 2; FIGURE 6; page 7, lines 11-16; page 8, lines 3-9; page 11, lines 8-13; page 18, lines 3-6). At least one processing zone for processing digital data is obtained from a digital capture device, wherein the at least one processing zone corresponds to a specific geometry that is a subdivided area represented in each frame of a stream of video frames. (See, for example, the embodiments disclosed in, but not limited to, FIGURE 1; FIGURE 2; FIGURE 3; page 11, line 28, to page 12, line 5). The method obtains a first frame of image data corresponding to the digital capture device that includes the at least one processing zone as a subdivided area. (See, for example, the embodiments disclosed in, but not limited to, FIGURE 1; FIGURE 2; FIGURE 3 FIGURE 4; FIGURE 5; FIGURE 6; page 11, lines 20-23, page 11, line 28, to page 12, line 5; page 13, lines 7-11; page 15, lines 7-10; page 20, lines 7-8). Then, a second frame of image data corresponding to the digital capture device that includes the same at least one processing zone. (See, for example, the embodiments disclosed in, but not limited to, FIGURE 1; FIGURE 2; FIGURE 3 FIGURE 4; FIGURE 5; FIGURE 6; page 11, lines 20-23; page 11, line 28, to page 12, line 5; page 13, lines 7-11; page 15, lines 10-12; page 20, lines 8-9). A determination is made regarding whether there is significant change in the image data between the first and second frames within the same at least one processing zone. (See, for example, the embodiments disclosed in, but not limited to, FIGURE 5; FIGURE 6; FIGURE 7; page 15, lines 13-20;

page 16, lines 7-11; page 20, lines 14-24; page 21, lines 4-8). The determination regarding whether significant change in the image data exists is made by evaluating differential data corresponding to an adjustable parameter in the image data that is represented within a geometry of the same at least one processing zone. (See, for example, the embodiments disclosed in, but not limited to, FIGURE 5; FIGURE 6; FIGURE 7; page 15, lines 21-25; page 15, line 29, to page 16, line 2; page 18, lines 6-8; page 18, lines 16-23; page 20, lines 14-24; page 20, lines 25-28; page 21, lines 4-8. An event associated with the image data is processed only if a significant change between the first and second frames within the same at least one processing zone is identified. (See, for example, the embodiments disclosed in, but not limited to, FIGURE 2; FIGURE 3 FIGURE 4; FIGURE 5; FIGURE 6; FIGURE 7; page 12, lines 15-21; page 21, lines 12-20). Processing the event includes storing the image data in the same at least one processing zone to a mass storage only if significant change in the image data is determined and excluding image data in the same or different at least one processing zone from being stored to the mass storage if no significant change in the image data is determined. (See, for example, the embodiments disclosed in, but not limited to, FIGURE 4; FIGURE 5; FIGURE 6; FIGURE 7; page 12, lines 15-21; page 16, lines 21-27; page 21, lines 12-20).

With regard to Claim 21, a system for security monitoring is provided. (See, for example, the embodiments disclosed in, but not limited to, FIGURE 1; FIGURE 2; page 7, lines 22-25). One or more monitoring locations that includes a monitoring device is operable to generate a digital image. (See, for example, the embodiments disclosed in, but not limited to, FIGURE 1; FIGURE 2; page 7, lines 22-30). A central processing server is operable to obtain the digital image and generate a user interface. (See, for example, the embodiments disclosed in, but not limited to, FIGURE 2; FIGURE 3 FIGURE 4; FIGURE 5; FIGURE 6; page 9, lines 1-5; page 12, lines 15-21; page 12, line 27, to page 13, line 1; page 13, lines 7-11; page 15, lines 7-10; page 20, lines 7-9). The at least one monitoring computing device operable to display the user

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS PLLC
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

interface and to obtain one or more processing zones corresponding to the digital image data. (See, for example, the embodiments disclosed in, but not limited to, FIGURE 1; FIGURE 2; FIGURE 3 FIGURE 4; FIGURE 5; FIGURE 6; FIGURE 7; page 11, lines 8-13; page 11, line 28, to page 12, line 5; page 12, lines 7-10; page 19, lines 1-7). The digital image data is processed by the central processing server to determine whether significant change exists in at least one processing zone between successive frames of the digital image data. (See, for example, the embodiments disclosed in, but not limited to, FIGURE 4; FIGURE 5; FIGURE 6; page 13, lines 7-11; page 15, lines 10-20; page 15, line 29 to page 16, line 2; page 16, lines 7-11; page 18, lines 6-8; page 20, lines 14-24; page 21, lines 4-8, page 21, lines 12-20). If a significant change is identified, the central processing server stores the digital image data in the at least one processing zone to a mass storage and excludes the digital image data in the same or different at least one processing zone from being stored to the mass storage if no significant change is identified. (See, for example, the embodiments disclosed in, but not limited ton FIGURE 2; FIGURE 3 FIGURE 4; FIGURE 5; FIGURE 6; FIGURE 7; page 9, lines 12-16; page 11, lines 20-23; page 13, lines 7-11; page 16, lines 21-27; page 21, lines 4-8; page 21, lines 12-20).

With regard to Claim 38, a method of processing image data in a computer system having a graphic user interface including a display and a user interface device is provided. (See, for example, the embodiments disclosed in, but not limited to, FIGURE 2; FIGURE 3 FIGURE 4; FIGURE 5; FIGURE 6; FIGURE 7; page 10, lines 25-26; page 10, line 30 to page 11, line 1; page 11, lines 8-13; page 18, lines 3-6). The method obtains a first frame of image data corresponding to an output from a digital capture device. (See, for example, the embodiments disclosed in, but not limited to, FIGURE 5; page 15, lines 7-10. The first frame of data is displayed within a display area in the graphical user interface. (See, for example, the embodiments disclosed in, but not limited to, FIGURE 7; page 20, lines 7-8). A designation of at least one processing zone from the user interface device is obtained, wherein the processing

zone corresponds to a specific geometric shape within the display area that represents a subdivided area in a stream of video frames and includes processing rule data. (See, for example, the embodiments disclosed in, but not limited to, FIGURE 5; FIGURE 6; page 18, lines 6-8; page 18, lines 16-23; page 19, lines 1-7). The processing zone is displayed within the display area of the graphical user interface. (See, for example, the embodiments disclosed in, but not limited to, FIGURE 6, FIGURE 7; page 18, lines 6-8; page 18, lines 16-23). A second frame of image data corresponding to the output from the digital capture device is obtained that includes a specific geometric shape within the display area representing a subdivided area in a stream of video frames. (See, for example, the embodiments disclosed in, but not limited to, FIGURE 5; FIGURE 6; FIGURE 7; page 15, lines 13-20; page 16, lines 7-11; page 20, lines 14-24; page 21, lines 4-8.) Then, a determination is made regarding whether there is significant change between the first and second frames within the at least one processing zone, wherein the determination of significant change is made by evaluating differential data corresponding to an adjustable parameter. (See, for example, the embodiments disclosed in, but not limited to, FIGURE 3 FIGURE 4; FIGURE 5; FIGURE 6; FIGURE 7; page 15, lines 13-25; page 15, line 29, to page 16, line 2; page 16, lines 7-11; page 21, lines 4-8). The method processes an event only if a significant change is determined between the first and second frames within the at least one processing zone. (See, for example, the embodiments disclosed in, but not limited to, FIGURE 2; FIGURE 3 FIGURE 4; FIGURE 5; FIGURE 6; FIGURE 7; page 12, lines 15-21; page 21, lines 12-2) wherein processing the event includes storing the image data in the at least one processing zone to a mass storage only if the significant change is determined and excluding image data in the same or different at least one processing zone from being stored to the mass storage if no significant change is determined. (See, for example, the embodiments disclosed in, but not limited to, FIGURE 4; FIGURE 5; FIGURE 6; FIGURE 7; page 12, lines 15-21; page 16, lines 21-27; page 21, lines 12-20).

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS PLLC
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1, 2, 4-22, 24-39, and 41-56 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 7,023,469, to Olson et al. (hereinafter "Olson"). Moreover, the Office Action rejected Claims 3, 23, and 40 under 35 U.S.C. § 103(a) as being obvious in view of Olson. Please note that the Examiner's final rejection dated December 8, 2008, merely references back to and reiterates the Examiner's rejection dated January 31, 2008. Accordingly, all of the references herein to the "Office Action" refer to the Office Action dated January 31, 2008. The grounds presented for appeal are as follows:

Ground 1: Whether Claims 1, 2, 4-22, 24-39, and 41-56 are anticipated under 35 U.S.C. § 102(e) in view of Olson.

Ground 2: Whether Claims 3, 23, and 40 are legally obvious under 35 U.S.C. § 103(a) in view of Olson.

Pursuant to 37 C.F.R. § 1.111 and for the reasons set forth below, appellants request reconsideration and allowance of the pending claims.

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS PLLC
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

VII. ARGUMENT

Ground 1: Whether Claims 1, 2, 4-22, 24-39, and 41-56 are unpatentable under 35 U.S.C. § 102(e) in view of Olson.

Claims 1, 2, 4-22, 24-39, and 41-56 were rejected under 35 U.S.C. § 102(e) as being anticipated by Olson. Claims 1, 21, and 38 are independent.

In order to anticipate a claim, the reference must teach every element of the claim. See M.P.E.P § 2131. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987).

Appellants submit that the 35 U.S.C. § 102(e) rejection is improper because Olson fails to teach all elements of Claims 1, 2, 4-22, 24-39, and 41-56.

1. Summary of Cited Reference

Olson

Olson is purportedly directed to a system for automatically capturing image data using a camera and an image processing device. The image processing device is configured to save a reference image from the camera and compare subsequent images to the reference image. In this regard, the image processing device detects and tracks "change regions" between the reference image and subsequent images. A "change region" is an area between successive images in which pixel variations exist. For each change region, the image processing section saves the path of movement of a particular object.

2. Independent Claims 1, 21, and 38 are allowable over Olson.

Claims 1, 21, and 38 were rejected under 35 U.S.C. § 102(e) as being anticipated by Olson. As set forth in further detail below, each of these claims is allowable over this cited art for at least the following reasons.

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS PLLC
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

A. Independent Claim 1

Claim 1 recites, the following:

> 1. A method for processing image data, the method comprising:
>
> obtaining at least one processing zone for processing digital data obtained from a digital capture device, wherein the at least one processing zone corresponds to a specific geometry that is a subdivided area represented in each frame of a stream of video frames;
>
> obtaining a first frame of image data corresponding to the digital capture device that includes the at least one processing zone as a subdivided area;
>
> obtaining a second frame of image data corresponding to the digital capture device that includes the same at least one processing zone;
>
> determining whether there is significant change in the image data between the first and second frames within the same at least one processing zone, wherein the determination of significant change in the image data is made by evaluating differential data corresponding to an adjustable parameter in the image data that is represented within a geometry of the same at least one processing zone; and
>
> processing an event only if a significant change in the image data is determined between the first and second frames within the same at least one processing zone, wherein processing the event includes storing the image data in the same at least one processing zone to a mass storage only if significant change in the image data is determined and excluding image data in the same or different at least one processing zone from being stored to the mass storage if no significant change in the image data is determined.

i. Olson fails to teach or suggest the claim element of "wherein the determination of significant change is made by evaluating differential data corresponding to an adjustable parameter."

Claim 1 recites a method of determining whether a significant change exists in a processing zone between multiple image frames. More specifically, the claimed method recites, "determining whether there is a significant change between the first and second frames within

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS PLLC
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

the at least one processing zone, wherein the determination of significant change is made by evaluating differential data corresponding to an adjustable parameter." The Office Action asserts that Olson teaches the aforementioned recitation of Claim 1 at block 136 of Fig. 9, initially stating: ". . . Note selection of events, objects, regions, duration, and actions to adjust the processing zone, A of fig. 9." See Office Action at page 4, lines 3-6. The relevant portion of Olson states the following:

> The web page of FIG. 9 also includes an event selection box 136, which the operator can use to indicate that the imaging processing section 27 is to check for a specified event, and to indicate what action is to be taken if the specified event occurs. In this regard, the operator can use a mouse to select one of several events identified in box 136, including an enter event, an exit event, a loiter event, a deposit event, a remove event, a move event, a rest event, and a lightsout event. The event selection box 136 allows the user to optionally restrict the monitoring for the specified event to certain types of detected objects, including a person, a box, a briefcase, a notebook, a computer monitor, any type of object, or just an unknown object. Event selection box 136 also allows the user to restrict the monitoring event to a particular region by identifying its label letter, such as the region 132 identified by the label letter "A".

[Olson at Col. 11, lines 4-19]. The broadest reasonable interpretation of this portion of Olson reveals that Olson does not teach or suggest "evaluating differential data corresponding to an adjustable parameter." Instead, the referenced text and corresponding figure describes the ability of a user to select between event types (e.g., enter, exit, loiter, etc.), objects to monitor (e.g., person, box, briefcase, notebook, etc.), and actions to take if the specified event occurs (e.g., beep, log, popup, etc.). Once the selections are made, processing is performed to determine whether video with attributes that match the received selections was captured.

However, the disclosure in Olson that processes video data to identify specific event types is not equivalent to and does not support the assertion that the reference teaches "determining whether there is a significant change between the first and second frames within the at least one processing zone . . . by evaluating differential data corresponding to an adjustable

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS PLLC
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

parameter." Those skilled in the art and others will recognize that the quality of video frames is affected by a number of factors including environmental conditions (e.g., smoke, fog, etc.), signal noise, lighting conditions, among others. For example, to detect motion in video frames in an area of low lighting, the processing performed for "evaluating differential data" should be relatively sensitive. If a camera captures images in low light conditions, small differences in image frames are likely to be indicative of motion. On the other hand, cameras that produce signals with substantial video noise generate video frames with considerable differences even when the captured area has not changed. In this instance, the processing performed for "evaluating differential data" should be relatively insensitive to minimize the number of false positives or instances when motion is incorrectly detected. To account for these types of device, transmission, and site-specific differences, the claimed subject matter determines "whether there is significant change in the image data between the first and second frames . . . by evaluating differential data *corresponding to an adjustable parameter*" in the image data. In this regard, the Office Action reads teachings into Olson with regard to Claim 1 that are not supported by the reference. The referenced section of Olson describes the ability to make selections regarding event types, objects to monitor, and actions to take if data indicative of the specified event is identified. Careful review of the cited sections of Carter and the reference taken as a whole fails to reveal anything in the way of "evaluating differential data corresponding to an adjustable parameter."

The Office Action seems to further allege that Olson teaches the aforementioned recitation of Claim 1 and references the "zoom function" of Olson in support of this proposition. See Office Action at page 4, lines 7-8. In this regard, the Office Action states: "Note the saved image is selected to display and [sic] zoom function is performed to recognize the person, which means adjustable parameter." See Office Action at page 4, line 7-8. However, the disclosure in Olson that allows a user to zoom in on a particular portion of an image is not equivalent to and does not support the assertion that the reference teaches "determining whether there is a significant change between the first and second frames within the at least one processing

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS PLLC
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

zone . . . by evaluating differential data corresponding to an adjustable parameter." Simply stated, the adjustable parameter (zoom function) of Olson does not correspond to evaluating differential data as recited in Claim 1. Instead, the zoom function of Olson involves receiving user input to view a portion of an image in greater detail by allocating selected image data (e.g., pixels) additional screen space. The zoom function does not involve or correspond to an adjustable parameter for "evaluating differential data" as recited in Claim 1. Therefore, Olson fails to teach or suggest the above feature of Claim 1.

ii. Olson fails to teach or suggest the claim elements of "processing an event only if a significant change in the image data is determined between the first and second frames within the same at least one processing zone, wherein processing the event includes storing the image data in the same at least one processing zone to a mass storage only if significant change in the image data is determined . . ."

The Office Action asserts that the cited reference teaches a processing zone as recited in the aforementioned element of Claim 1, stating: "obtaining (27 of fig. 1, Note camera (23 of fig. 1) obtains a monitoring area, region, or zone (fig. 4) for the image processing (27 of fig. 1) processes the monitored zone) at least one processing zone (71 and 72 of figs. 5 and 6, Note processing zone (71, 72))." Office Action at page 2, line 17 to page 3, line 1. In this instance, the "hallway 71" and the "alcove 72" in the physical premises being monitored in Olson is alleged to read on the "at least one processing zone" recited in Claim 1. The Office Action subsequently states: "obtaining a first frame of image data corresponding to one of the digital capture devices (fig. 2A and 2B; fig. 2C and 2D; fig. 2E and 2F; fig. 2G and 2H; see also figs. 5 and 6) that includes the at least one processing zone as a subdivided area (71 of figs. 5 and 6)." See Office Action at page 3, lines 6-8. In this instance, the "hallway 71" and the "alcove 72" are alleged to read on the claim element of a "subdivided area" as recited in Claim 1. The Office Action subsequently states: "obtaining a designation of at least one processing zone (87 of

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS PLLC
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

figs. 6 and 8; and A, 132, and 133 of fig. 9) from the user interface device (21 of fig. 1); wherein the processing zone (87 of figs. 6 and 8; A of fig. 9) corresponds to a specific geometric shape (86 of figs. 6 and 8)." Office Action at page 3, lines 10-13. In this instance, the "bounding box 87" in Olson is alleged to read on the "at least one processing zone" and the "person 86" is alleged to read on "a specific geometric shape" as recited in Claim 1. The Office Action subsequently states: "determining whether there is significant change in the image data between the first and second frames within the same at least one processing zone (71 of figs. 5 and 6; the image processing section (27 of fig. 1) saves a reference image from the video camera and compares subsequent images to the reference image; col. 5, lines 32-39; the comparison figs. 5 and 6, where a person entered the hallway)." Office Action at page 3, line 17 to page 4, line 3. In this instance, the "hallway 71" in Olson is again alleged to read on the "at least one processing zone" as recited in Claim 1. The Office Action subsequently states: "wherein the determination of significant change in the image data is made by evaluating differential data corresponding to an adjustable parameter (136 of fig. 9, Note selection of events, objects, regions, duration, and actions to adjust the processing zone, A of fig. 9)." See Office Action at page 4, lines 3-6. In this instance, the "event selection box 136" in Olson is alleged to read on the "at least one processing zone" as recited in Claim 1.

Generally summarized, the Office Action alleges that at least three separate and distinct concepts (e.g., hallway/alcove 71-72, bounding box 87, and the event selection box 136) of Olson read on the claim element of "at least one processing zone" as recited in Claim 1. Moreover, the Office Action repeatedly alleges that these same concepts in Olson read on other claim elements, as indicated above. A rejection is only appropriate when "the ground of rejection is fully and clearly stated." M.P.E.P. § 707.07(d) (8th ed. 7th rev. 2008). Appellants respectfully submit that the Office Action's use and interchange of separate and distinct concepts purportedly disclosed in Olson as reading on the same elements of Claim 1 does not satisfy the

standard that "the ground of rejection is fully and clearly stated" as required by M.P.E.P. § 707.07(d) (8th ed. 7th rev. 2008).

Independent Claim 1 recites "processing an event only if a significant change in the image data is determined between the first and second frames within the same at least one processing zone, wherein processing the event includes storing the image data in the same at least one processing zone to a mass storage only if significant change in the image data is determined . . . ." As best appellants understand, the Office Action asserts that Olson teaches the aforementioned recitation of Claim 1 at Col. 6, lines 21-52. The relevant portion of Olson states the following:

> More specifically, the image processing section 27 has already stored on the hard disk drive 34 the reference image of FIG. 5. In the disclosed embodiment, the reference image of FIG. 5 is first sub-sampled, and then the resulting low-resolution version of the image is stored on the hard disk drive 34, in order to reduce the amount of storage space needed for each such reference image. Objects which enter the observed area are of primary interest, rather than the observed area itself, and a low-resolution image of the observed area is thus sufficient for most applications.
>
> For each detected object such as the person 86, the image processing section 27 also determines the Cartesian coordinates within each image of the midpoint of the lower side of the bounding box for that detected object. This information is saved on the hard disk drive. In other words, for each detected object, a Cartesian coordinate pair for that object is saved for each video image in which the object is present. As to a given object, the set of Cartesian coordinate pairs for all of the images in which that object was present can serve as a trace of the movement of the object within the observed area, as will be discussed in more detail later.
>
> The image processing section 27 also saves a selected image of each detected object. In the disclosed embodiment, this selected image is just a portion of the overall image from the video camera 23. In particular, it is the portion of the image which is located within the bounding box for the object of interest. Thus, if the selected image for the person 86 was derived from the video image of FIG. 6, it would be the portion of that image within the bounding box 87. This selected image or image portion is stored at full resolution, in order to have a top-quality view of the detected object.

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS PLLC
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

Olson purportedly discloses a system for tracing the movement of an object (e.g., person 86) in a particular area of a premises (e.g., hallway 71). Item 87 referenced in the above cited section of Olson is described as a "bounding box 87" that is created to identify a change region. In this regard, Olson states. "The system determines **for each image** a bounding box around the change region which corresponds to the person 86." See Olson at Col. 6, lines 16-19. As such, the image processing device detects and tracks "change regions" of images in which pixel variations exist between the reference image and subsequent images. In further describing a bounding box, Olson states:

> With respect to each detected change region, the image processing section 27 determines a bounding box for the change region. An example of a bounding box is shown at 43 in FIG. 2H. It will be noted that the bounding box 43 is a rectangular box, just large enough to contain the entire change region. That is, no pixel of the change region lies outside the box, but every side of the box touches at least one pixel of the change region. [Olson at Col. 4, lines 27-34.]

When creating the bounding box 43 or 87 to track the movement of the person 86, all of the pixel variation that exists between an image being analyzed from a reference image is identified. Then, the bounding box 43 or 87 is created around the area that experienced the pixel variation.

Simply stated, Olson does not teach a method for "processing an event only if a significant change in the image data is determined *between the first and second frames within the same at least one processing zone.*" Olson clearly indicates that entire images are processed in order to track movement of an object (e.g., person) within the view of the video camera. Specifically, all of the pixels in an image are analyzed relative to a reference image to generate the bounding box 43 or 87. See Olson at Col. 4, lines 6-18, lines 41-44; Col. 3-4, lines 64-2. However, those skilled in the art and others will recognize that analyzing an entire image to identify change regions and generating a bounding box is highly resource intensive. In contrast

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS PLLC
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

to Olson, Claim 1 recites determining "if a significant change in the image data is determined between the first and second frames *within the same at least one processing zone . . .*" By limiting the determination of whether a significant change exists to the "same at least one processing zone," resource intensive and error-prone processing is avoided. In contrast to Olson, the processing zone of the present application is not an area where pixel variations have necessarily been identified. Instead, the processing zones are merely a "subdivided area" of an image. As the name suggests, processing of image data outside of the "processing zone" is not performed by aspects of the present invention in contrast to the disclosure of Olson.

Olson does not teach a method of " . . . wherein processing the event includes storing the image data in the *same at least one processing zone to a mass storage* only if significant change in the image data is determined." As indicated above, Olson traces the path of an object by creating a bounding box 87 that identify change regions in different images. In this regard, Olson states: "Objects which enter the observed area are of primary interest, rather than the observed area itself . . ." Olson at Col. 6, lines 34-36. Accordingly, as the object moves, the location of the bounding box 87 also varies depending on which pixels in an image have changed relative to a reference image. Appellants respectfully submit that persisting image data in a bounding box 87, whose location varies depending on the location of a change region, is not equivalent to storing the image data "in the *same at least one processing zone* to a mass storage," as recited in Claim 1.

iii. Olson fails to teach or suggest the claim elements of "excluding image data in the same or different at least one processing zone from being stored to the mass storage if no significant change in the image data is determined."

The Office Action asserts, and appellants agree, that Olson discloses excluding certain image data from being persisted to a mass storage. However, the Office Action further asserts that Olson discloses "excluding image data in the same or different at least one processing zone

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS PLLC
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

from being stored to the mass storage if no significant change in the image data is determined." In this regard, the Office Action asserts that Olson teaches the aforementioned recitation of Claim 1, stating that Olson teaches "excluding image data in the same or different at least one processing zone from being stored (Col. 6, lines 49-65; Note selected image or image portion is stored at full resolution) to the mass storage if not [sic] significant change in the image data is determined (the image processing section (26 of fig. 1) does not saves [sic] each of the numerous images of the person (86 of fig. 6) which are obtained while the person walks down the hallway (71 of fig. 6); this disclosure suggests that the processing section (27) excludes the image data at the same or different monitoring area or zone to the storage (34 of fig. 1))." See Office Action at pages 4-5, lines 19-3. Appellants note that the Office Action misquoted this recitation of Claim 1. The correct language of the corresponding recitation reads as follows: "excluding image data in the same or different at least one processing zone from being stored to the mass storage if no significant change in the image data is determined."

However, the referenced text and corresponding Figure 6 of Olson specifically describe detecting an object and saving images of the object that meet certain criteria. In particular, "the selection of the particular image to be saved is an automatic determination, which is effected with simple heuristics." Olson at Col. 6, line 66 to page 7, line 1. The heuristics for selecting an image to save include, whether a person is facing the camera, proximity to the camera, whether an event is an entrance or exit event, and change in the size of the bounding box. See Olson at Col. 7, lines 1-30. The "simple heuristics" or criteria for determining whether to persist data to mass storage of Olson is fundamentally different and teaches away from the criteria recited in Claim 1.

Specifically, the criteria for persisting data to mass storage recited in Claim 1, includes whether the image data experienced a "significant change" and is located in "at least one

processing zone." These criteria recited in Claim 1 are fundamentally different from the criteria used to perform "simple heuristics" in determining which images to save as disclosed in Olson.

As explained above, Olson fails to teach or suggest a method for processing image data that includes numerous elements of Claim 1 as described above. Accordingly, the Examiner fails to establish a *prima facie* case of anticipation and the 35 U.S.C. § 102(e) rejection of Claim 1 is improper. Appellants respectfully request that the rejection be overturned.

B. Independent Claim 21

i. Olson fails to teach or suggest certain elements of Claim 21

Claim 21 recites a system that was rejected in the Office Action on the same basis as the method recited in Claim 1. In this regard, independent Claim 21 recites:

> at least one monitoring computing device operable to display the user interface and to obtain one or more processing zones corresponding to the digital image data, wherein the central processing server processes the digital image data to determine whether significant change exists in at least one processing zone between successive frames of the digital image data, and only if a significant change is identified, the central processing server stores the digital image data in the at least one processing zone to a mass storage and excludes the digital image data in the same or different at least one processing zone from being stored to the mass storage if no significant change is identified.

These elements in Claim 21 are substantially similar to corresponding elements in Claim 1. Because the subject matter of these features as recited in Claim 21 is not taught or suggested by the reference as described above in regard to Claim 1, these features of Claim 21 are likewise not taught or suggested by Olson.

ii. The Office Action failed to address all of the features of Claim 21

Claim 21 recites subject matter that is **not** recited in Claim 1. In this regard, Claim 21 recites a system configured with: "... a monitoring device operable to generate a digital image;" "a central processing server operable to obtain the digital image and generate a user

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS PLLC
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

interface;" and "at least one monitoring computing device operable to display the user interface and to obtain one or more processing zones corresponding to the digital image data . . ." The Office Action does not fully and clearly state how the Olson reference discloses each of these three separate claim elements. Instead, the Office Action merely rejects the system of Claim 21 on the same basis as the method of Claim 1. Appellants respectfully submit that the Office Action's failure to state how the Olson reference discloses each of these three separate claim elements does not satisfy the standard that the ground of rejection be fully and clearly stated as required by M.P.E.P. § 707.07(d) (8th ed. 7th rev. 2008).

A careful review of the cited sections of Olson and the reference taken as a whole fails to reveal anything in the way of "a central processing server" let alone a central processing server in communication with the "at least one monitoring computing device." In this regard, the "image processing section 27" of Olson that does all of the processing of received images is implemented within a standalone camera. In this regard, Olson states:

> In the disclosed embodiment, the image processing section 27 is physically disposed within the housing of the camera unit 12. Thus, the camera unit 12 is a standalone device which can coupled directly to a telephone line or a network, such as the network 14. However, it will be recognized that the image processing section 27 could alternatively be implemented with a personal computer which is physically separate from the video camera 23, which has a plug-in video capture card serving as the video interface circuit, and which has a plug-in network interface card serving as the network interface circuit.

The Office Action alleges and appellants agree that the camera unit of Olson may be communicatively connected to a personal computing device. However, aspects of the claimed subject matter, utilize a "central processing server" to generate a user interface that the "at least one monitoring computing device" is operable to display and use to receive input to "obtain one or more processing zones." Accordingly, the elements of Claim 21 recite a multi-tiered computer system in which specific computing devices perform location-appropriate functions.

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS PLLC
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

Appellants submit that Olson's disclosure of using a standalone device to process images for transmission to a computing device, is not equivalent to a monitoring system comprised of a "... a monitoring device operable to generate a digital image;" "a central processing server operable to obtain the digital image and generate a user interface;" and "at least one monitoring computing device operable to display the user interface and to obtain one or more processing zones corresponding to the digital image data..." as recited in Claim 21. Consequently, appellants respectfully request that the 35 U.S.C. § 102(e) rejection of Claim 21 be overturned for these additional reasons.

C. Independent Claim 38

Because Claim 38 was rejected on the same basis as Claim 1, Claim 38 is allowable for at least the same reasons as Claim 1. Specifically, Claim 38 recites a system for performing a method that is substantially similar to the method of Claim 1. Because the subject matter of Claim 1 is not taught or suggested by the references as described above, the elements of Claim 38 are likewise not taught or suggested by Olson.

3. Dependent Claims 2, 4-20, 22, 24-37, 39, and 41-56

Claims 2 and 4-20 depend on independent Claim 1; Claims 22 and 24-39 depend on independent Claim 21; and Claims 39 and 41-56 depend on independent Claim 38. As discussed above, Olson fails to teach each and every element of independent Claims 1, 21, and 38. Accordingly, for the above-mentioned reasons, Claims 2, 4-20, 22, 24-37, 29, and 41-56 are also not anticipated by Olson. Accordingly, appellants respectfully request that the rejection with regard to Claims 2, 4-20, 22, 24-37, 29, and 41-56 be overturned. Additionally, these claims are not anticipated by Olson for additional reasons, some of which are discussed in further detail below.

Claims 5, 25, and 41 include the additional recitation of "wherein the specific geometry includes a hyperlink to one or more monitoring devices capable of input or output to a physical

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS PLLC
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

location that corresponds to the processing zone." The Office Action asserts that Olson teaches this claim element and references three different file types that Olson creates as reading on the elements in Claim 5, 25, and 41. In this regard, the Office Action alleges that these "files are each an HTML shell which invokes an applet that facilitates access to files within the directory containing that particular LOGLIST.HTML file." See Office Action at page 5. However, Claims 5, 25, and 41 recite wherein "the specific geometry includes a hyperlink" and not file types that are created by the system. Accordingly, appellants respectfully request that the rejections of Claims 5, 25, and 41 be overturned.

Claims 6, 26, and 42 include the additional recitation of "wherein evaluating the differential data includes statistically comparing a sample of pixels within the first and second frame of image data." The Office Action alleges that Olson teaches this claim element and references Figure 3 of Olson in support of this proposition. Specifically, the entire basis of the rejection in the Office Action with regard to these claims states the following: "fig. 3; Note stationary object is removed or disappeared." See Office Action at page 5. The description that corresponds to Figure 3 in Olson describes methodology used to identify particular types of events, such as entrance and exit events. These types of events are identified when an object was previously absent or present in one frame is found to have entered or exited an area being monitored. Appellants respectfully submit that this disclosure in Olson does not read upon the claim element of "wherein evaluating the differential data includes statistically comparing a sample of pixels within the first and second frame of image date," as recited in Claims 6, 26, and 42. Accordingly, for these additional reasons, appellants respectfully request that the rejection of Claims 3, 26, and 42 be overturned.

Claims 7, 27, and 43 include the additional recitation of "wherein evaluating the differential data includes evaluating specific color data for individual pixels." The Office Action

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS PLLC
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

cites Col. 3-4, lines 64-5 of Olson as reading on the claim elements and Claims 7, 27, and 43. In its entirety, the cited sections of Olson state the following:

> The low-resolution difference image of FIG. 2D is then thresholded. In other words, the gray scale value for each pixel in the image of FIG. 2D is compared to a predetermined threshold, and is then set to be either on or off (black or white), depending on whether the value is above or below the threshold. The resulting threshold image is shown in FIG. 2E. Each pixel in the threshold image of FIG. 2E can be represented by a binary "1" or a binary "0", depending on whether the pixel is considered to be on or off.

[Olson at Col. 3, line 64 to Col. 4, line 5.] The cited sections of Olson clearly indicate that the reference identifies a "gray scale" value for each pixel which is set to be either "black or white." Nowhere in this disclosure of Olson does the reference mention or contemplate RBG color data. Accordingly, for these additional reasons, appellants request that the rejection of Claims 7, 27, and 43 be overturned.

Claims 8, 28, and 44 include the additional recitation of "wherein the adjustable parameter corresponds to a number of pixels to be compared." The Office Action asserts and appellants agree that the Olson reference compares pixels between different images. However, the Office Action further asserts that a selected person is the adjustable parameter in stating the following: "Note the adjustable parameter is corresponding to the selected person (86 of fig. 6)." See Office Action at page 6. As described above with reference to Claim 1, the Office Action asserts that multiple separate and distinct concepts of Olson read on the claim element of "an adjustable parameter." Appellants respectfully submit that "the selected person 86" as taught in Olson is not an "adjustable parameter" that corresponds "to a number of pixels to be compared." Accordingly, for these additional reasons, appellants respectfully request that the rejection of Claims 8, 28, and 44 be overturned.

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS PLLC
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

Ground 2: Whether Claims 3, 23, and 40 are legally obvious under 35 U.S.C. § 103(a) in view of Olson

Claims 3, 23, and 40 depend from independent Claims 1, 21, and 38 and are allowable for at least the same reasons as Claim 1, 23, and 40 as well as for the additional subject matter they recite.

The Office Action rejected Claims 3, 23, and 40 under 35 U.S.C. § 103(a) as being unpatentable over Olson in view of certain suggestions. It is unclear to appellants exactly what grounds that the Office Action is using to reject these claims. It appears that the Office Action rejects Claims 3, 23, and 40 using Official Notice that the elements in these claim are a matter of design choice, without so stating. In this regard, the Office Action states the following:

> Re [sic] claim 3, 23, and 40, Olson teaches the specific geometry of the processing zone is characterized by the rectangle (132, 133, A of fig. 9) and suggests the user may define the region by using the mount [sic] pointer to identify the corners of the region (A of fig. 9) by clicking on each corner. Therefore, one skill [sic] in the art would use the suggested mouse pointer to create the specific geometry of the processing zone by clicking on each corner in a circular shape as desired. Doing [sic] would allow the user to specifically designate the created region (zone) in any shape such as square, rectangle, or circle of an event in an image and easily monitor for occurrence object [sic] of the event within the specific region (zone). [Office Action at page 8.]

On one hand, the Office Action seems to acknowledge that Olson does not disclose the elements in Claims 3, 21, and 38. On the other hand, a conclusion is ultimately drawn that by using the disclosure of Olson "one skill [sic] in the art would use the suggested mouse pointer to create the specific geometry of the processing zone by clicking on each corner in a circular shape as desired." Appellants note that the logic of this rejection is not founded as circular shapes are not created by selecting "corners" of the geometry as suggested in the Office Action. Moreover, the elements of Claims 3, 23, and 40 allow a user to designate a specific geometric shape to

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS PLLC
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

monitor for motion detection. For example, a sensitive security area, such as a circular window of a premises, may be designated as a processing zone. A careful review of the cited sections of Olson and the reference taken as a whole fails to reveal anything in the way of allowing a user to designate a circular processing zone. Moreover, appellants respectfully submit that Official Notice would not be appropriate in this instance since the fact asserted as common knowledge is not "capable of such instant and unquestionable demonstration as to defy dispute." *In re Knapp Monarch Co.*, 296 F.2d 230 (C.C.P.A. 1961); *see* M.P.E.P. § 2144.03. Appellants submit that "wherein the specific geometry of the processing zone is characterized by a circle" is not obvious in light of the cited reference as common knowledge in the art, nor is it supported in the record. For example, processing a stream of pixel data from a circular processing zone to determine "whether there is significant change in the image data" requires configuring an application to identify and process image data from a processing zone having the recited shape. One of ordinary skill would not find it obvious to process image data from a circular processing zone by applying known techniques used in other types of processing zones and expect it to work based on common knowledge. Accordingly, for these additional reasons, appellants respectfully request that the rejection of Claims 3, 23, and 40 be overturned.

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS PLLC
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

VIII. CLAIMS APPENDIX

1. A method for processing image data, the method comprising:

obtaining at least one processing zone for processing digital data obtained from a digital capture device, wherein the at least one processing zone corresponds to a specific geometry that is a subdivided area represented in each frame of a stream of video frames;

obtaining a first frame of image data corresponding to the digital capture device that includes the at least one processing zone as a subdivided area;

obtaining a second frame of image data corresponding to the digital capture device that includes the same at least one processing zone;

determining whether there is significant change in the image data between the first and second frames within the same at least one processing zone, wherein the determination of significant change in the image data is made by evaluating differential data corresponding to an adjustable parameter in the image data that is represented within a geometry of the same at least one processing zone; and

processing an event only if a significant change in the image data is determined between the first and second frames within the same at least one processing zone, wherein processing the event includes storing the image data in the same at least one processing zone to a mass storage only if significant change in the image data is determined and excluding image data in the same or different at least one processing zone from being stored to the mass storage if no significant change in the image data is determined.

2. The method as recited in Claim 1, wherein the specific geometry of the processing zones is characterized by a rectangle.

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS PLLC
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

3. The method as recited in Claim 1, wherein the specific geometry of the processing zone is characterized by a circle.

4. The method as recited in Claim 1, wherein the specific geometry is graphically displayed through a user interface.

5. The method as recited in Claim 4, wherein the specific geometry includes a hyperlink to one or more monitoring devices capable of input or output to a physical location that corresponds to the processing zone.

6. The method as recited in Claim 1, wherein evaluating the differential data includes statistically comparing a sample of pixels within the first and second frame of image data.

7. The method as recited in Claim 1, wherein evaluating the differential data includes evaluating specific color data for individual pixels.

8. The method as recited in Claim 1, wherein the adjustable parameter corresponds to a number of pixels to be compared.

9. The method as recited in Claim 8, wherein the adjustable parameters are entered through a graphical user interface.

10. The method as recited in Claim 9, wherein the graphical user interface is a WWW browser user interface.

11. The method as recited in Claim 1, wherein the adjustable parameter is dynamically modified.

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS PLLC
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

12. The method as recited in Claim 1, wherein multiple processing zones are obtained from one or more frames of video, wherein at least one processing zone is evaluated using a parameter different from the at least one parameter used in the previously selected processing zone within the one or more frames of video.

13. The method as recited in Claim 12, wherein at least one processing zone excludes an area from evaluation.

14. The method as recited in Claim 1, wherein processing an event includes executing user-defined sequences if a significant change is determined.

15. The method as recited in Claim 14, wherein processing an event includes sounding alarm.

16. The method as recited in Claim 14, wherein processing an event includes archiving video data.

17. The method as recited in Claim 16, wherein archiving the video includes storing the video data in a file directory corresponding to given time period.

18. The method as recited in Claim 17, wherein archiving the video includes naming the file directory according to a time of the day.

19. A computer-readable medium having computer-executable instructions for performing the method recited in Claim 1.

20. A computer system having a processor, a memory, and an operating environment, the computer system operable to perform the method recited in Claim 1.

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS PLLC
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

21. A system for providing security monitoring, the system comprising:

one or more monitoring locations including a monitoring device operable to generate a digital image;

a central processing server operable to obtain the digital image and generate a user interface;

at least one monitoring computing device operable to display the user interface and to obtain one or more processing zones corresponding to the digital image data, wherein the central processing server processes the digital image data to determine whether significant change exists in at least one processing zone between successive frames of the digital image data, and only if a significant change is identified, the central processing server stores the digital image data in the at least one processing zone to a mass storage and excludes the digital image data in the same or different at least one processing zone from being stored to the mass storage if no significant change is identified.

22. The system as recited in Claim 21, wherein the specific geometry of the processing zone is characterized by a rectangle.

23. The system as recited in Claim 21, wherein the specific geometry of the processing zone is characterized by a circle.

24. The system as recited in Claim 21, wherein the specific geometry is graphically displayed through the user interface.

25. The system as recited in Claim 24, wherein the specific geometry includes a hyperlink to the monitoring device capable of input or output to a physical location that corresponds to the processing zone.

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS PLLC
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

26. The system as recited in Claim 21, wherein the central processing server is further operable to statistically compare a sample of pixels within a first and second frame of image data.

27. The system as recited in Claim 21, wherein the central processing server is further operable to evaluate specific color data for individual pixels of a first and second frame.

28. The system as recited in Claim 21, wherein the central processing server is operable to process the image data according to an adjustable parameter.

29. The system as recited in Claim 28, wherein the adjustable parameter is user specified through the graphical user interface.

30. The system as recited in Claim 28, wherein the adjustable parameter is dynamically modified.

31. The system as recited in Claim 21, wherein the graphical user interface includes multiple processing zones, and wherein at least one processing zone is evaluated using a parameter different from at least one parameter used in the other processing zone.

32. The system as recited in Claim 31, wherein at least one processing zone excludes an area from evaluation.

33. The system as recited in Claim 31, wherein the central processing server is further operable to process an event according to a user-defined sequence.

34. The system as recited in Claim 33, wherein processing an event includes sounding the alarm.

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS PLLC
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

35. The system as recited in Claim 33, wherein processing an event includes archiving video.

36. The system as recited in Claim 35, wherein archiving video includes storing the video data in a file directory corresponding to a given period of time.

37. The system as recited in Claim 36, wherein archiving the video includes naming the file directory according to a time of day.

38. In a computer system having a graphic user interface including a display and a user interface device, a method for processing image data, the method comprising:

obtaining a first frame of image data corresponding to an output from a digital capture device;

displaying the first frame of data within a display area in the graphical user interface;

obtaining a designation of at least one processing zone from the user interface device, wherein the processing zone corresponds to a specific geometric shape within the display area that represents a subdivided area in a stream of video frames and includes processing rule data;

displaying the processing zone within the display area of the graphical user interface;

obtaining a second frame of image data corresponding to the output from the digital capture device that includes a specific geometric shape within the display area representing a subdivided area in a stream of video frames;

determining whether there is significant change between the first and second frames within the at least one processing zone, wherein the determination of significant change is made by evaluating differential data corresponding to an adjustable parameter; and

processing an event only if a significant change is determined between the first and second frames within the at least one processing zone, wherein processing the event includes

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS PLLC
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

storing the image data in the at least one processing zone to a mass storage only if the significant change is determined and excluding image data in the same or different at least one processing zone from being stored to the mass storage if no significant change is determined.

39. The method as recited in Claim 38, wherein the geometric shape of the processing zones is characterized by a rectangle.

40. The method as recited in Claim 38, wherein the geometric shape of the processing zone is characterized by a circle.

41. The method as recited in Claim 38, wherein the processing zone includes a hyperlink to one or more monitoring devices capable of input or output to a physical location that corresponds to the processing zone.

42. The method as recited in Claim 38, wherein evaluating the differential data includes statistically comparing a sample of pixels within the first and second frame of image data.

43. The method as recited in Claim 38, wherein evaluating the differential data includes evaluating specific color data for individual pixels.

44. The method as recited in Claim 38, wherein the adjustable parameter corresponds to a number of pixels to be compared.

45. The method as recited in Claim 44, wherein the adjustable parameters are entered through a graphical user interface.

46. The method as recited in Claim 38, wherein the graphical user interface is a WWW browser user interface.

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS PLLC
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

47. The method as recited in Claim 38, wherein the adjustable parameter is dynamically modified.

48. The method as recited in Claim 38 further comprising obtaining a designation of a second processing zone from the user interface device, wherein the second processing zone corresponds to a specific geometric shape within the display area and includes processing rule data, and wherein the processing rule data is different from the processing rule data from the previously designated processing zone.

49. The method as recited in Claim 48, wherein at least one processing zone excludes an area from evaluation.

50. The method as recited in Claim 38, wherein processing an event includes executing user-defined sequences if a significant change is determined.

51. The method as recited in Claim 50, wherein processing an event includes sounding alarm.

52. The method as recited in Claim 50, wherein processing an event includes archiving video data.

53. The method as recited in Claim 52, wherein archiving the video includes storing the video data in a file directory corresponding to given time period.

54. The method as recited in Claim 52, wherein archiving the video includes naming the file directory according to a time of the day.

55. A computer-readable medium having computer-executable instructions for performing the method recited in Claim 38.

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS PLLC
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

56. A computer system having a processor, a memory, and an operating environment, the computer system operable to perform the method recited in Claim 38.

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS PLLC
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

IX. EVIDENCE APPENDIX

None

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS PLLC
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

X. RELATED PROCEEDING APPENDIX

None

Respectfully submitted,

CHRISTENSEN O'CONNOR
JOHNSON KINDNESS[PLLC]

Clint J. Feekes
Registration No. 51,670
Direct Dial No. 206.695.1633

CJF:lal

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS[PLLC]
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100